

# West Virginia Vector-Borne Disease Surveillance Report

**JANUARY 1 – September 23, 2021**

*The purpose of this report is to share descriptive surveillance data related to vector-borne disease activity with public health partners in West Virginia. All information in this report is considered provisional. For questions or comments, contact the Zoonotic Disease Program in the Division of Infectious Disease Epidemiology at [WVZDProgram@wv.gov](mailto:WVZDProgram@wv.gov).*

## **MOSQUITO-BORNE DISEASE**

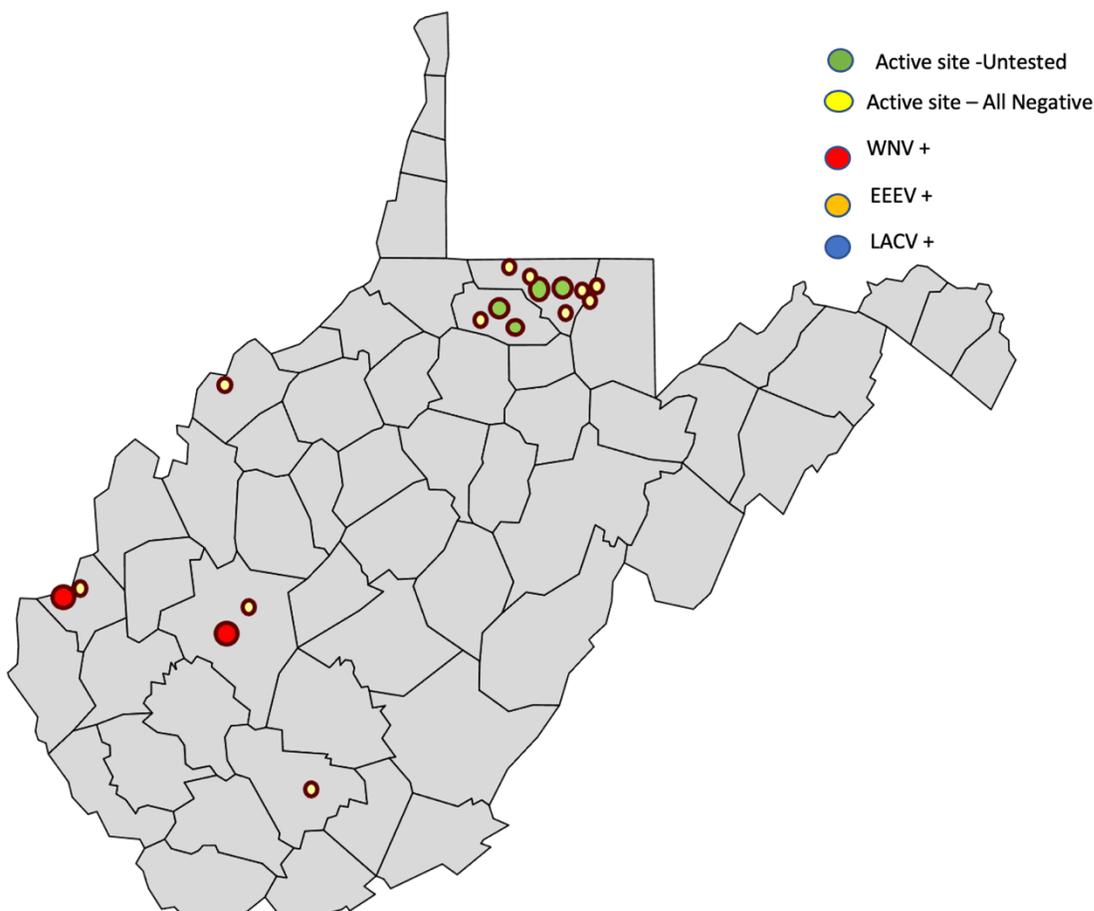
Surveillance for these diseases in West Virginia focuses on four endemic mosquito transmitted diseases—La Crosse virus (LACV), West Nile virus (WNV), St. Louis encephalitis virus (SLEV), and eastern equine encephalitis virus (EEEV) and travel-associated, or imported diseases, such as chikungunya, dengue fever, malaria, and Zika virus (ZIKV).

### **HUMAN SURVEILLANCE**

**\*\*There have been no confirmed or probable cases of mosquito-borne disease as of September 23, 2021**

### **MOSQUITO SURVEILLANCE**

During the period of **January 1 to September 23, 2021**, 18 locations in the following 7 counties have served as mosquito surveillance sites and provided sample testing for MBD as shown in Fig. 1.



**Figure 1.** Active mosquito surveillance sites and sample testing results through **September 23, 2021**

# TICKBORNE DISEASE

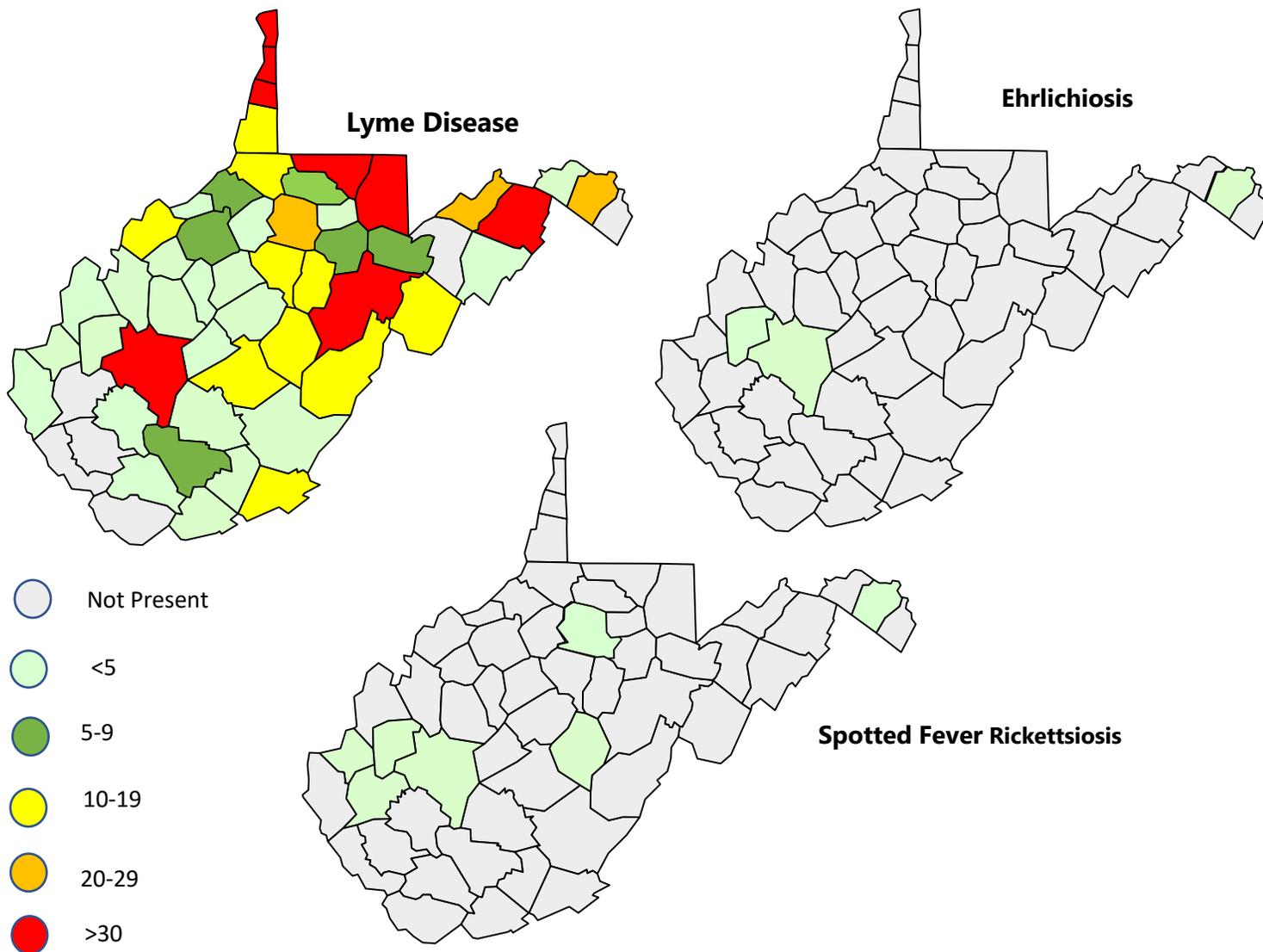
## HUMAN SURVEILLANCE

Through **September 23, 2021**, **768** confirmed and probable cases of tickborne diseases (TBDs) were reported in West Virginia. The majority of cases were **Lyme disease** cases. Spotted fever group rickettsioses (SFGRs) and Ehrlichiosis cases were also reported (Fig. 2).

**Table 1.** Summary of human cases of tickborne diseases through **September 23, 2021**.

Tickborne Disease	# Confirmed and Probable Cases through 09-23-2021
Lyme Disease	755
Ehrlichiosis	5
Spotted Fever Rickettsiosis	8
<b>Total</b>	<b>768</b>

Table includes only confirmed or probable cases that have been reviewed and closed by the Vector-borne Disease Epidemiologist.

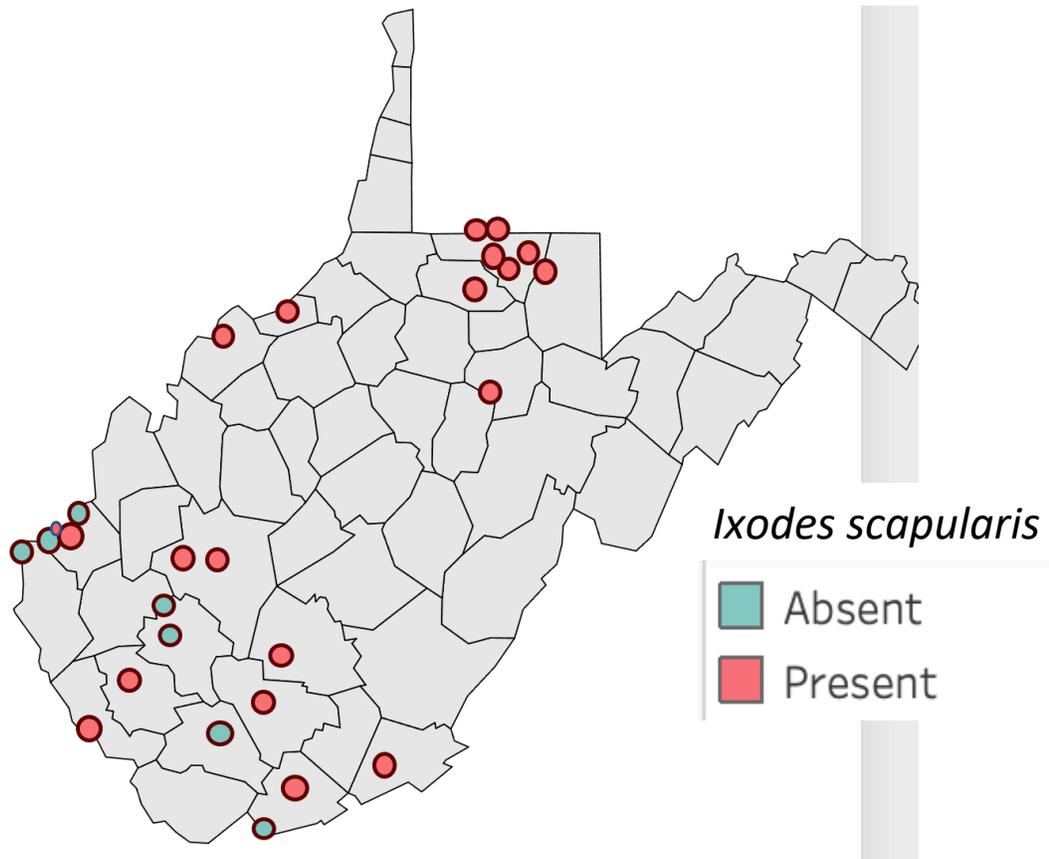


**Figure 2.** Presence of confirmed or probable TBD at county level

### ACTIVE TICK SURVEILLANCE

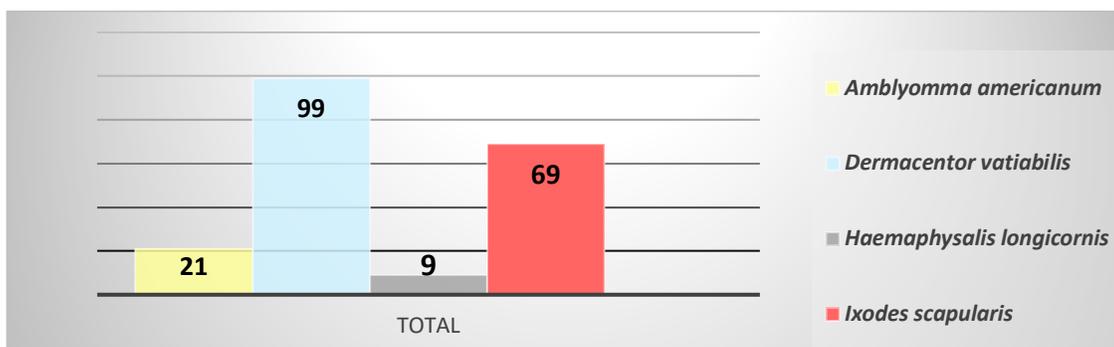
The following areas were West Virginia Tick Surveillance Program sites as of **September 23, 2021**. Fig. 3 shows the absence or presence of *Ixodes scapularis*. *Ixodes scapularis* is the species responsible for the majority of TBD in WV, including Lyme disease (*Borrelia burgdorferi*), human anaplasmosis (*Anaplasma phagocytophilum*), and human babesiosis (*Babesia microti*).

**Figure 3.** Surveillance locations with absence or presence of *Ixodes scapularis*



### PASSIVE TICK SURVEILLANCE

The following numbers were reported by the West Virginia Veterinarian Tick Submission Project participants as of September 23, 2021.



**Table 2.** Summary of totals of tick species submitted through **September 23, 2021**